FIG.1

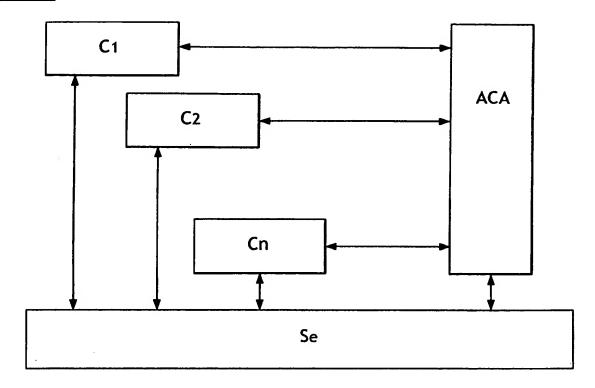


FIG.2

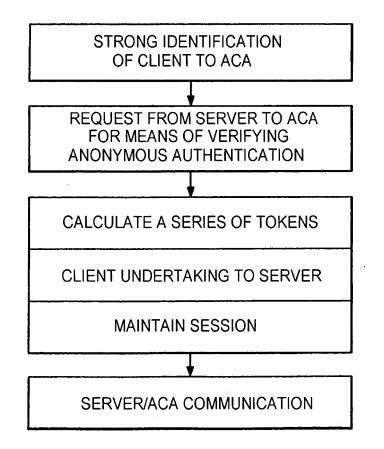


FIG.3

Initialization token-signing and session-opening protocol

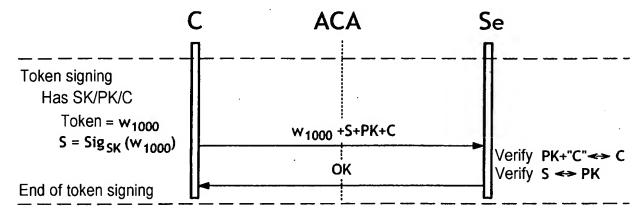
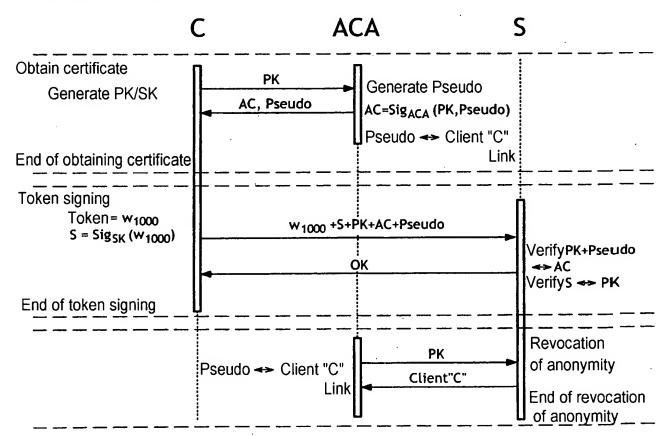
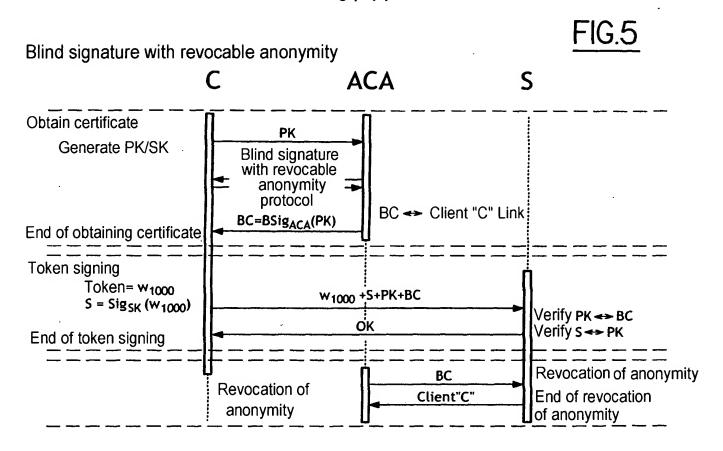
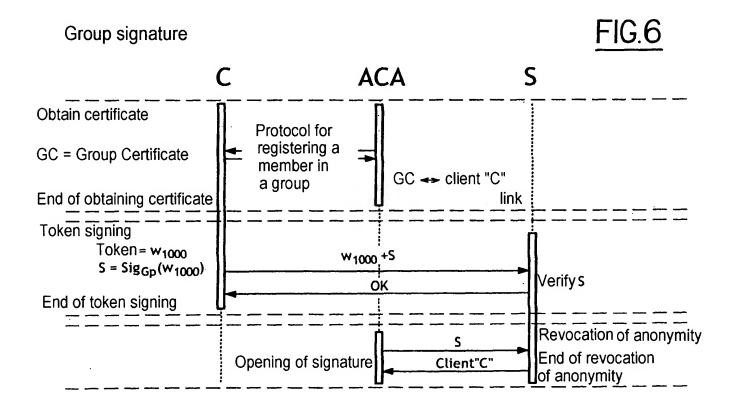


FIG.4

Anonymous certificaté







		Server S	: initialization	
Client C1		Client C2		Bid
Token	Value	Token	Value	Starting bid
W ₁₀₀₀	signature	X ₁₀₀₀	signature	1000

		Instruction 1	: Client 1 bid	
Clie	Client C1		nt C2	Bid
Token	Value	Token	Value	Current bid
W999	100	X ₁₀₀₀	0	1100

Instruction 2: Client 1 bid					
Client C1		Client C2		Bid	
Token	Value	Token	Value	Current bid	
W999	100	X ₉₉₇	3*100	1300	

Instruction 3: Client 1 bid					
Client C1		Client C2		Bid	
Token	Value	Token	Value	Current bid	
W996	4*100	X ₉₉₇	3*100	1400	

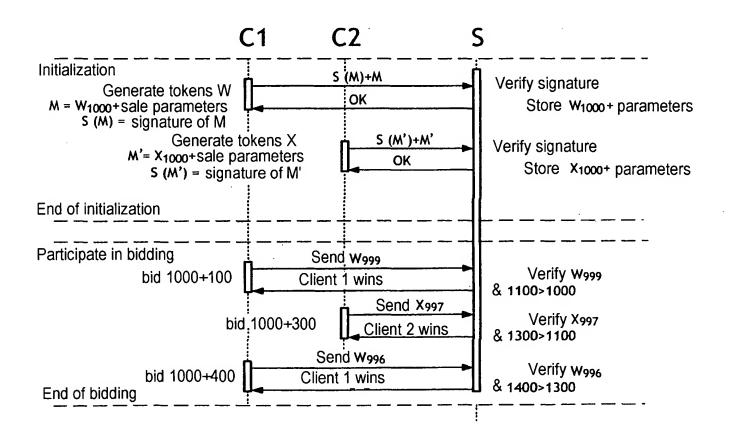
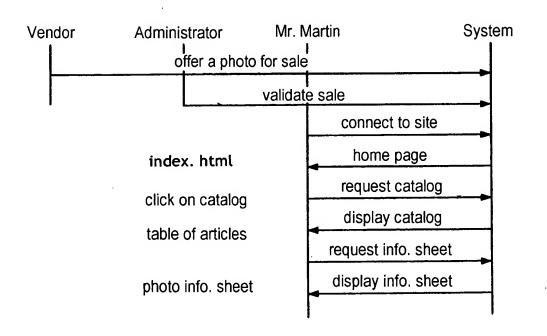


FIG.8 Connect to bidding site Check Vendor Register article Display catalog Update View catalog articles Visitor Administrator Choose Detect start and article end of sale Obtain article info. sheet

FIG.9



Register with group

Supply a strong authentication certificate

Verify identity

Visitor

Generate keys

Create a member

SA

Obtain anonymous certificate

Revoke a member

FIG.11

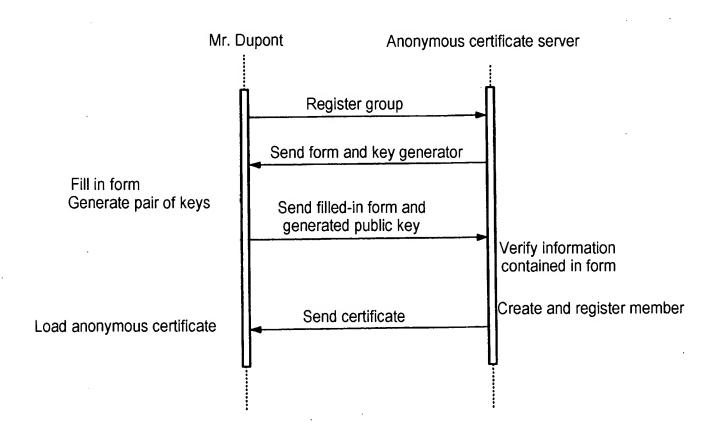


FIG.12 Request to participate in bidding Check registration Visitor Send signed token with certificate and Verify signature article id Register client Client Sign initialization token Authorize client Generate tokens Load applet

FIG.13

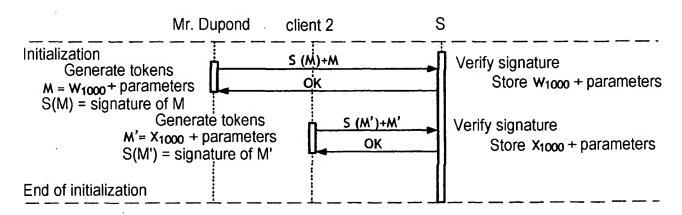
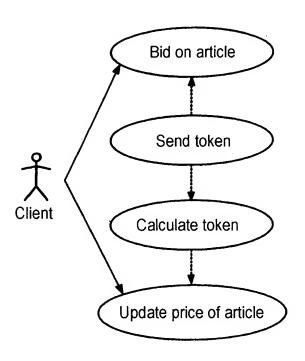
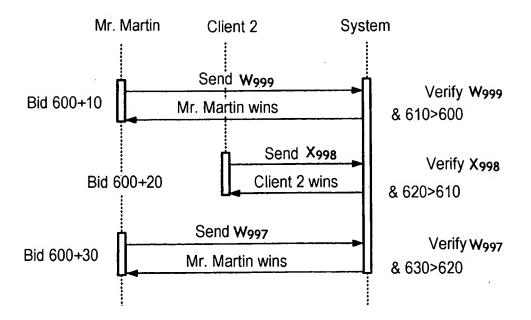
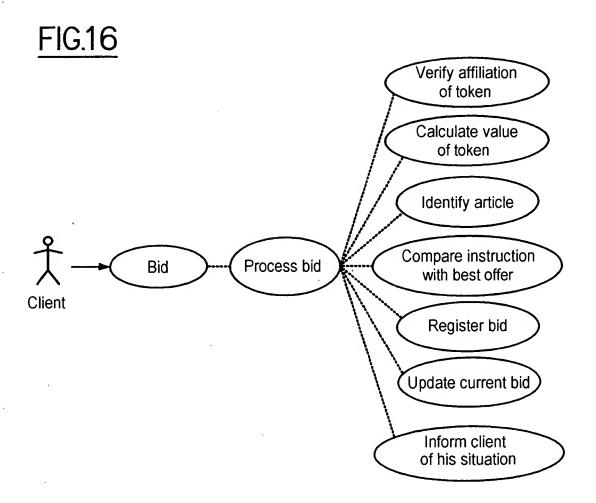


FIG.14







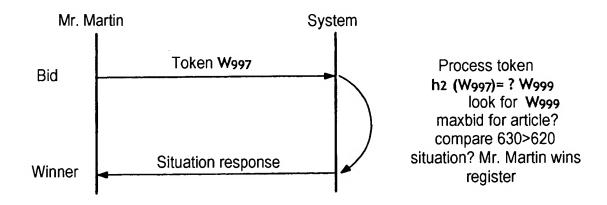


FIG.18

